

Amendments to the Specification

Please amend paragraphs 0004 and 0034 (including the title for paragraph 0034) as shown below in marked form:

[0004] Unfortunately, it can be difficult to form a single-phase quaternary compound containing the transition metals cobalt, manganese and nickel in a lithium-containing crystal lattice. Attainment of a single-phase can be made easier by excluding one or more of the transition metals manganese or nickel (e.g., to make a three metal or ternary system such as $\text{LiNi}_{0.8}\text{Co}_{0.2}\text{O}_2$ or a two metal or binary system such as LiCoO_2), but this may also decrease battery performance or introduce other problems. Attainment of a single-phase quaternary compound may be achieved by coprecipitation of mixed metal hydroxides as recommended and employed in U.S. Patent Application No. 2003/0022063 A1 (Paulsen et al.) entitled "LITHIATED OXIDE MATERIALS AND METHODS OF MANUFACTURE" ~~and by~~ coprecipitation of mixed metal nitrates and metal hydroxides as employed in Examples 19 and 20 of U.S. Patent Application No. 2003/0027048 A1 (Lu et al.) entitled "CATHODE COMPOSITIONS FOR LITHIUM-ION BATTERIES". However, coprecipitation requires filtration, repeated washing and drying and thus exhibits relatively limited throughput and high manufacturing costs.

Comparative Comparison Example 1

[0034] Powders of $\text{Co}(\text{OH})_2$ (7.63 parts, available from Alfa Aesar), NiCO_3 (1.27 parts, available from Spectrum Chemical) and MnCO_3 (1.17 parts, available from Spectrum Chemical) were combined in a tungsten carbide milling jar having approximately a 100 ml volume and containing one 15 mm ball and seven 6 mm balls of Zircon milling media like that used in ~~Example 2~~ Example 1. The components were dry-milled for 30 minutes on a SPEX Model 8000-D Dual Shaker Mixer (available from SPEX CertiPrep Inc.). Lithium was added to the transitional metal mixture in the form of Li_2CO_3 (3.79 parts, available from FMC). After the lithium addition, further dry-milling was carried out for 15 minutes.